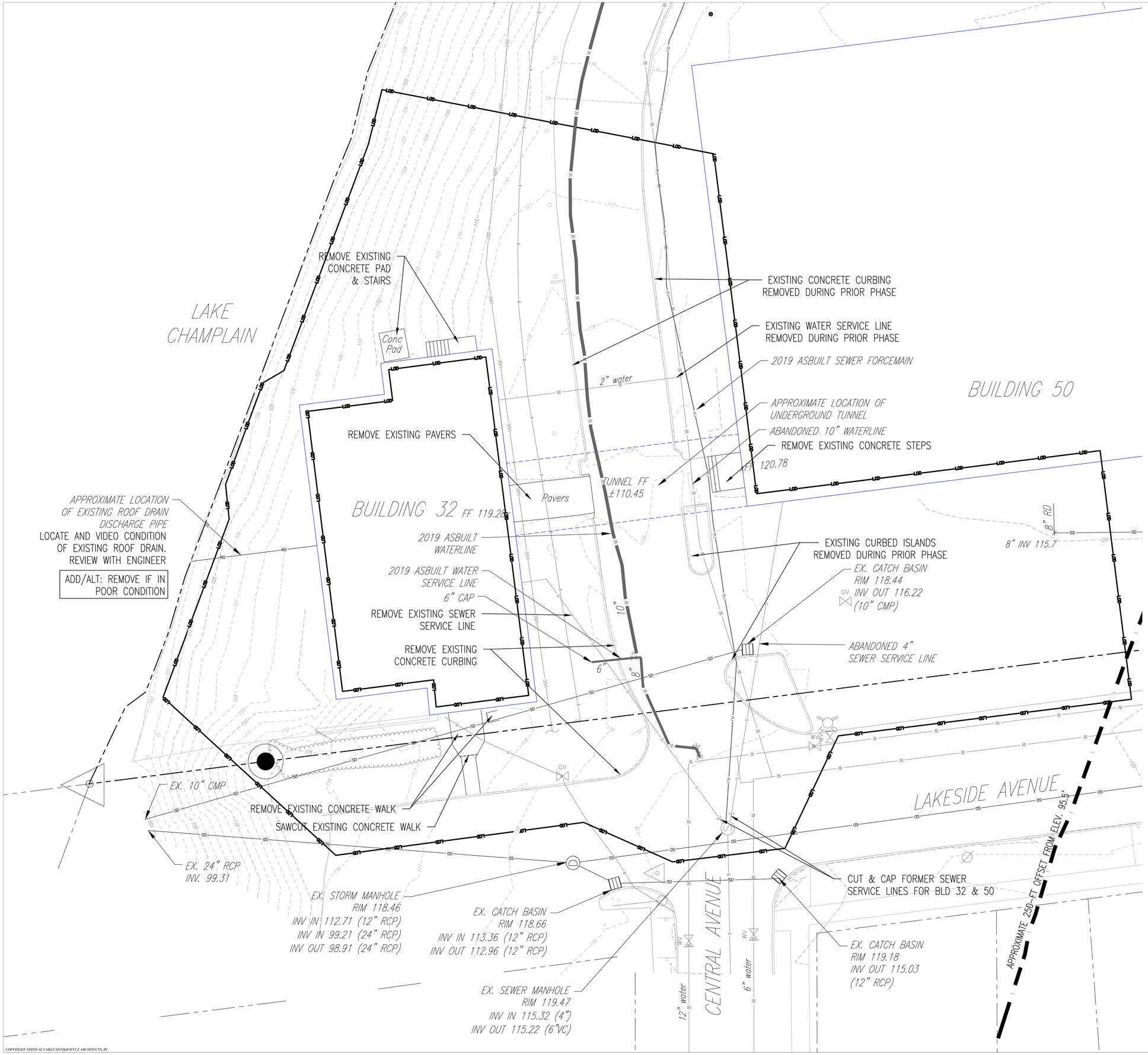


LEGEND

- PROPERTY LINE
- EDGE OF PAVEMENT/CURB
- MINOR CONTOUR
- MAJOR CONTOUR
- WATERLINE/GATE VALVE/HYDRANT
- SANITARY SEWER LINE/MANHOLE
- STORM LINE/CATCH BASIN/MANHOLE
- ROOF DRAIN LINE
- NATURAL GAS LINE/VALVE
- UNDERGROUND COMMUNICATIONS

SURVEY NOTES

1. PROPERTY IS TAX MAP PARCEL ID 053-2-011-000. THE PHYSICAL ADDRESS OF THE PROPERTY IS 32, 44 & 50 LAKESIDE AVENUE, BURLINGTON, VERMONT 05401.
2. EXISTING PHYSICAL FEATURES AND TOPOGRAPHY DEPICTED ON THIS PLAN HAS BEEN COLLECTED FROM A VARIETY OF SOURCES INCLUDING THE FOLLOWING:
   - 2.1. A SURVEY TITLED "EXISTING CONDITIONS PLAN, BLODGETT CAMPUS, LAKESIDE AVENUE, BURLINGTON, VERMONT", PREPARED BY KREBS AND LANSING CONSULTING ENGINEERS, INC, DATED APRIL 16, 2018.
   - 2.2. DESIGN INFORMATION & LIMITED UTILITY AS BUILT INFORMATION FROM 2019 WORK RELATED TO BUILDING 44 & BUILDING 50 IMPROVEMENTS.
3. THIS PLAN IS NOT A BOUNDARY SURVEY. PROPERTY LINES AND EASEMENTS DEPICTED ON THIS PLAN ARE BASED ON A PLAT ENTITLED, 'PLAT OF RESURVEY, LAKESIDE OVENS, LLC, 44 & 50 LAKESIDE AVENUE, CITY OF BURLINGTON, VERMONT', PREPARED BY CIVIL ENGINEERING ASSOCIATES. THE PLAT IS RECORDED IN BOOK 0539C PAGE 539 OF THE CITY OF BURLINGTON LAND RECORDS.
4. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITIES SHOWN ON PLANS WERE TAKEN FROM FIELD OBSERVATIONS OF VISIBLE UTILITIES AND ARE NOT GUARANTEED TO BE ACCURATE OR COMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING UTILITY LOCATIONS PRIOR TO COMMENCING WORK. NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN UTILITIES AS SHOWN AND AS FOUND. THE CONTRACTOR SHALL CONTACT DIG SAFE (811 or 888-344-7233) A MINIMUM OF 72 HOURS, BUT NOT INCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO ANY CONSTRUCTION.
5. NORTH ORIENTATION IS REFERENCED TO APPROXIMATE VERMONT GRID NORTH DERIVED FROM GPS READINGS OBSERVED BY OTHERS.
6. ELEVATIONS ARE REFERENCED TO APPROXIMATE NAVD 88 DERIVED FROM GPS READINGS OBSERVED BY OTHERS.

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 30" x 42"

SMITH ALVAREZ SIENKIEWYCZ
ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington, VT
05401
P: 802 • 863 • 2227
F: 802 • 863 • 0093

CONSULTANTS

CIVIL
ENGINEERING VENTURES
208 FLYNN AVE, SUITE 2A
BURLINGTON, VT 05401
P: 802-863-6225
F: 802-863-6306

LANDSCAPE
DISTINCTIVE LANDSCAPING
211 GREENBUSH ROAD
CHARLOTTE, VT 05445
P: 802-425-2877
F: 802-425-2797

STRUCTURAL
ARTISAN ENGINEERING
120 GRAHAM WAY, SUITE 124
SHELBURNE, VT 05482
P: 802-497-3531

MECHANICAL/ ELECTRICAL
LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

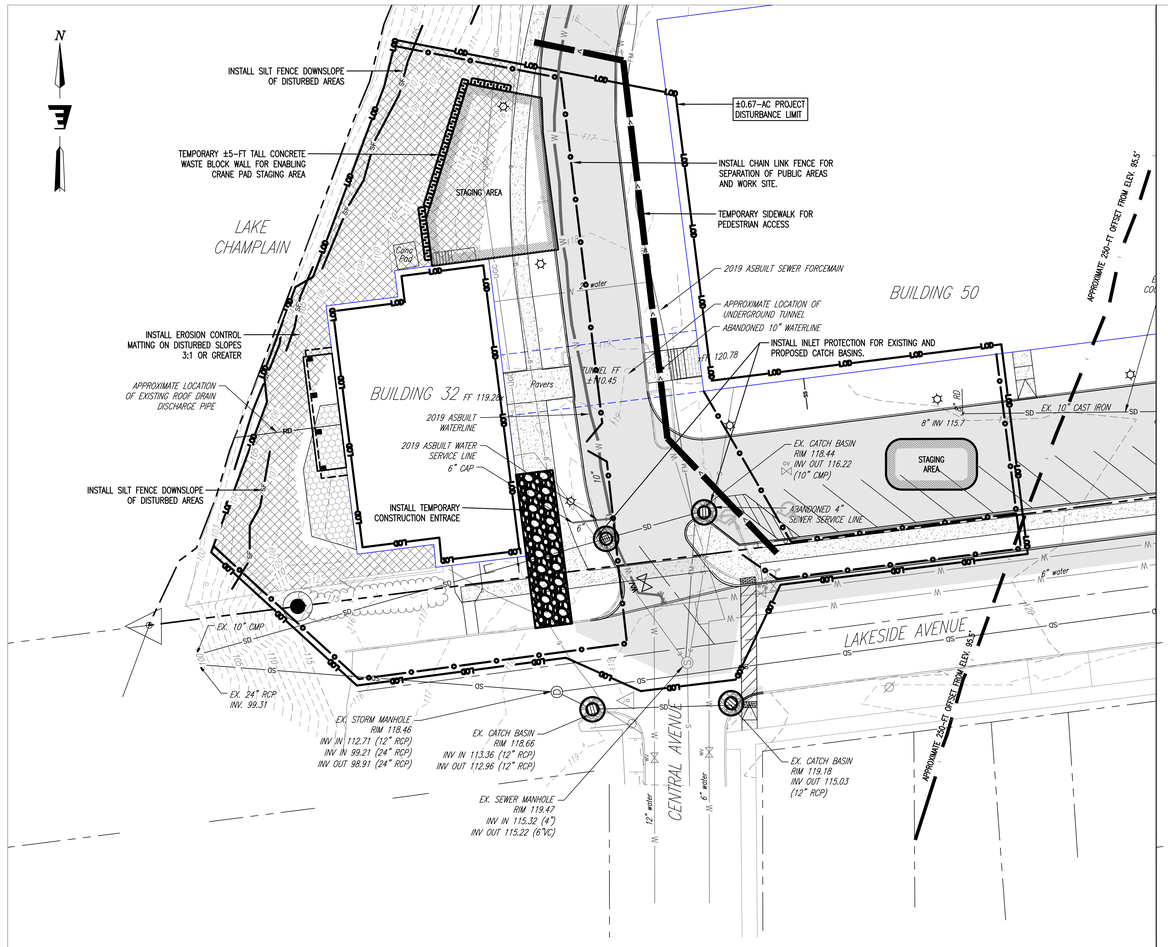
HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

REVISIONS

EXISTING CONDITIONS & DEMOLITION PLAN

C1.0



SITE EPSC PLAN

SCALE: 1" = 20'

EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES.

EXPORTED MATERIAL SHALL BE HAULED OFF SITE AT THE TIME OF INITIAL EXCAVATION. NO SOIL STOCKPILES SHALL BE MAINTAINED ON SITE.

TEMPORARY INLET PROTECTION – INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS ≤ 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT IF COLLECTED IN STRUCTURE AS SOON AS POSSIBLE.

PERMANENT EROSION CONTROL NETTING.
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT–OF–WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEEDED AND MULCHED.

STAGING AREA

TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON–SOIL, NON–ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

SF

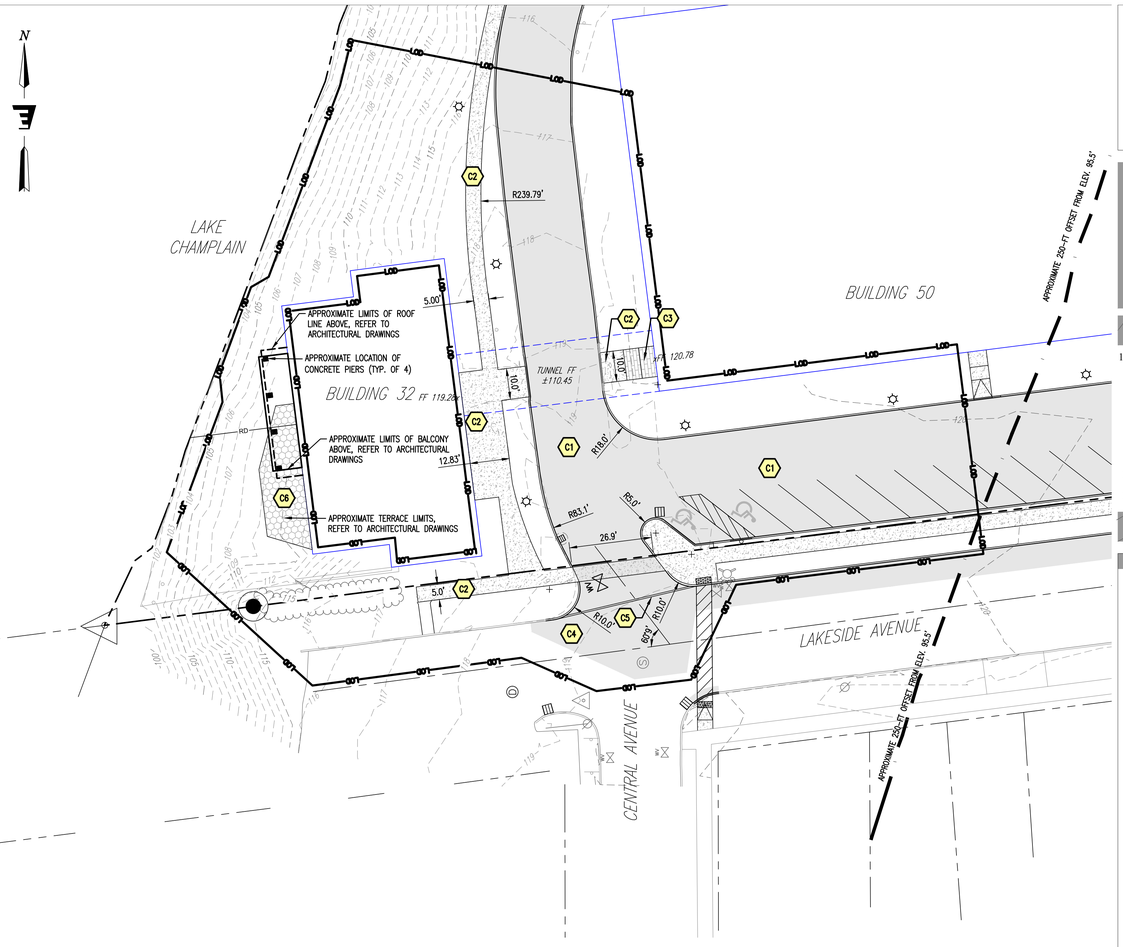
TEMPORARY SILT FENCING
THIS STRUCTURAL MEASURE IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, INSTALL CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ONTO ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

CONSTRUCTION OR CHAIN LINK FENCING
THIS STRUCTURAL MEASURE IS INSTALLED ALONG THE PERIMETER OF THE PROJECT AREA. IN MANY CASES THE LIMIT OF DISTURBANCE WILL COINCIDE WITH THE FENCING OR INDICATE BUFFER AREAS TO BE PROTECTED. THE FENCING IS EFFECTIVE WHEN USED TO SEPARATE THE PROJECT AREA FROM ADJACENT AREAS USED BY THE PUBLIC. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. CONFIRM LOCATION, EXTENTS AND GATES WITH OWNER. FENCE LOCATION AND GATES TO BE RE–ADJUSTED AS NECESSARY BASED ON OWNER REQUIREMENTS AND COORDINATION.

LOD

LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN. INSTALL CONSTRUCTION FENCING ALONG THE LIMIT OF DISTURBANCE TO SEPARATE THE PROJECT AREA FROM ADJACENT AREAS USED BY THE PUBLIC. FENCING SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. CONFIRM LOCATION AND EXTENT WITH OWNER.

GRAPHIC SCALE
20 0 10 20 40 80
1 inch = 20 ft.
for sheet size 30" x 42"



SITE LAYOUT PLAN

SCALE: 1" = 20'

PROPOSED SURFACE LEGEND

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE
- PROPOSED GRANITE PAVERS
- PROPOSED PERMEABLE PAVERS
- PROPOSED VEHICULAR CONCRETE
- PROPOSED DEPRESSED CURB WITH TRANSITION

REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISH & SCORING PATTERN

PROPOSED SITE FEATURES

- C1 PAVED DRIVES, SURFACE PARKING & STRIPING
- C2 CONCRETE SIDEWALK
- C3 GRANITE PAVERS
- C4 PAVEMENT PATCH
- C5 FLUSH CURB ACROSS DRIVE
- C6 PERVIOUS PAVERS

LOT COVERAGE CALCULATION

±6.67–AC PRE–DEVELOPMENT IMPERVIOUS AREA
(PRIOR TO BUILDING 44 & 50 REDEVELOPMENT PROJECT)

±6.41–AC POST–DEVELOPMENT IMPERVIOUS AREA

6.41–AC/14.89–AC = 43% IMPERVIOUS

FLOOR AREA RATIO CALCULATION

BUILDING 32	±18,000–SF
BUILDING 44/50	±136,000–SF
BEACH CLUB	±3,300–SF
TOTAL GSF	±141,100–SF

FAR 0.24

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SMITH
ALVAREZ
SIENKIEWYCZ
ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington, VT
05401
P: 802•863•2227
F: 802•863•0093

CONSULTANTS

CIVIL
ENGINEERING VENTURES
208 FLYNN AVE, SUITE 2A
BURLINGTON, VT 05401
P: 802-863-6255
F: 802-863-6306

LANDSCAPE
DISTINCTIVE LANDSCAPING
211 GREENBUSH ROAD
CHARLOTTE, VT 05445
P: 802-425-2877
F: 802-425-2797

STRUCTURAL
ARTISAN ENGINEERING
120 GRAHAM WAY, SUITE 124
SHELBURNE, VT 05482
P: 802-497-3531

MECHANICAL/ ELECTRICAL
LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

REVISIONS

SITE LAYOUT & EPSC PLAN

C1.1

LAKE CHAMPLAIN

BUILDING 50

BUILDING 32 FF 119.25

2019 ASBUILT SEWER FORCEMAIN

APPROXIMATE LOCATION OF UNDERGROUND TUNNEL

ABANDONED 10" WATERLINE

TUNNEL FF ±110.45

FF 120.78

2019 ASBUILT WATERLINE

2019 ASBUILT WATER SERVICE LINE 6" CAP

EX. CATCH BASIN RIM 118.44 INV OUT 116.22 (10" CMP)

ABANDONED 4" SEWER SERVICE LINE

8" INV 115.7

EX. 10" CMP

EX. 24" RCP INV. 99.31

EX. STORM MANHOLE RIM 118.46 INV IN 112.71 (12" RCP) INV IN 99.21 (24" RCP) INV OUT 98.91 (24" RCP)

EX. CATCH BASIN RIM 118.66 INV IN 113.36 (12" RCP) INV OUT 112.96 (12" RCP)

EX. SEWER MANHOLE RIM 119.47 INV IN 115.32 (4") INV OUT 115.22 (6"VC)

EX. CATCH BASIN RIM 119.18 INV OUT 115.03 (12" RCP)

LAKESIDE AVENUE

CENTRAL AVENUE

12" water

6" water

APPROXIMATE 250-FT OFFSET FROM ELEV. 95.5'

REFER TO SEWER DETAILS & PROFILES ON SHEET C2.0

PROPOSED UTILITY LEGEND

250	MAJOR CONTOUR
251	MINOR CONTOUR
S	SEWER COLLECTION LINE/MANHOLE
SS	SEWER SERVICE LINE
GV W	WATERLINE/GATE VALVE
WS	WATER SERVICE LINE
SD	STORM LINE/CATCH BASIN
RD	ROOF DRAIN
E	ELECTRICAL CONDUIT

PROPOSED UTILITY SCHEDULE

- W1 — NEW 6" WATER SERVICE LINE WITH 45-DEG BENDS AS INDICATED
- E1 — APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL LINES PROVIDE (5) 4" CONDUITS & MAINTAIN MINIMUM 3-FT SEPARATION TO EXISTING LAKESIDE AVE HYDRANT
- ST1 — PROP. 4-FT I.D. CATCH BASIN INSTALLED INLINE WITH EXISTING CMP PIPE MATCH EXISTING CMP INVERT ELEVATIONS
- ST2 — ADD/ALT REPLACE ROOF DRAIN DISCHARGE PIPE
- SS1 — PROP. BLD 50 SEWER LINE EXIT INV. OUT: 116.15 (6" SDR 35 PVC TO SS2)
- SS2 — PROP. 4-FT I.D. SEWER MANHOLE RIM: 120.50 INV. IN: 115.95 (6" SDR 35 PVC FROM SS1) INV. OUT: 115.85 (6" SDR 35 PVC TO EX. SMH)
- SS3 — CORE & BOOT FOR NEW CONNECTIONS TO EXISTING SEWER MANHOLE RIM: 119.47 INV. IN: 115.30 (6" SDR 35 PVC FROM SS2) INV. IN: 115.30 (6" SDR 35 PVC FROM SS5) INV. OUT: 115.20 (EXISTING 6" V.C.)
- SS4 — PROP. BLD 32 SEWER LINE EXIT INV. OUT: 115.87 (6" SDR 35 PVC TO SS5)
- SS5 — PROP. 4-FT I.D. SEWER MANHOLE RIM: 119.12 INV. IN: 115.77 (6" SDR 35 PVC FROM SS4) INV. OUT: 115.67 (6" SDR 35 PVC TO EX. SMH)

GRAPHIC SCALE

10 0 5 10 20 40

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ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington, VT
05401
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LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

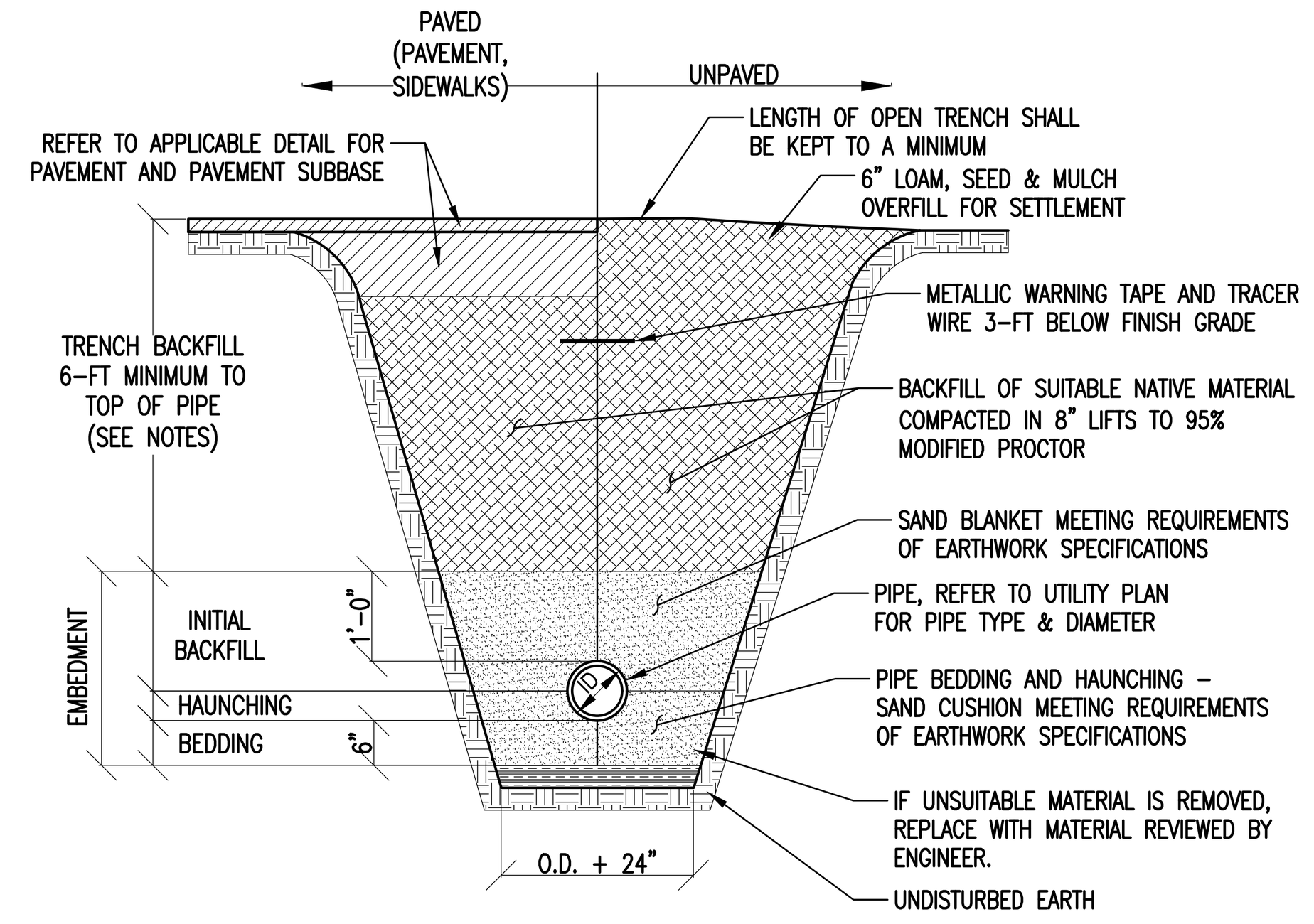
HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

REVISIONS

SITE GRADING & UTILITY PLAN

C1.2

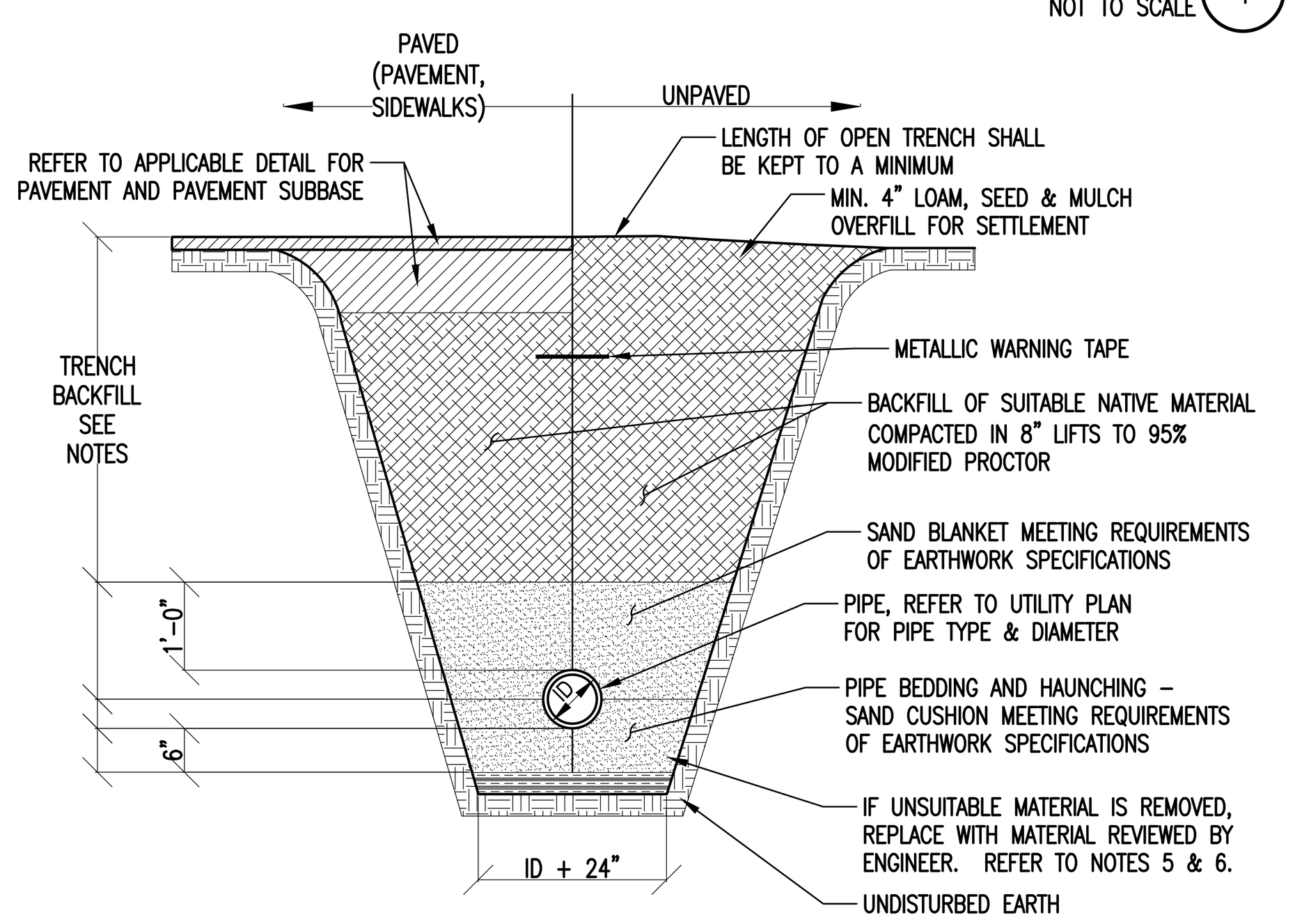


WATER TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
3. PROVIDE 6-FT MINIMUM COVER OVER WATER PIPE.
4. INSTALL WATER PIPE IN ACCORDANCE WITH AWWA STANDARD C600.
5. BACKFILL SHALL BE OF A SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED FOR BACKFILL WITHIN TWO FEET OF THE TOP OF THE PIPE.
6. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.

WATER TRENCH DETAIL (1)

NOT TO SCALE

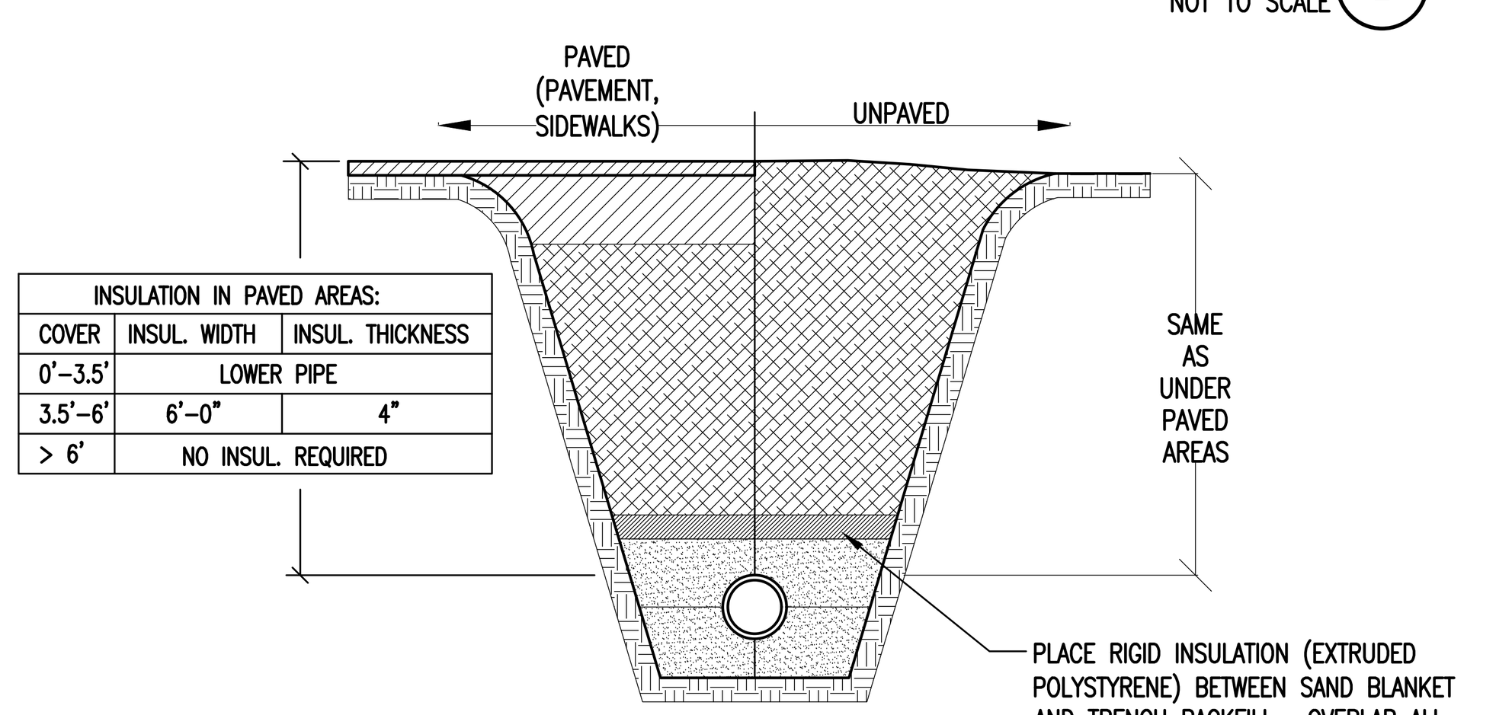


SANITARY SEWER TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
3. FOR BUILDING SEWERS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 4'-0". WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH LESS THAN 3'-0" UNDER DRIVEWAYS, EXTRA HEAVY CAST IRON OR OTHER HIGH STRENGTH PIPE SHALL BE USED. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
4. FOR SEWER COLLECTION SYSTEMS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 5'-0". THIS DEPTH SHALL BE INCREASED TO 6'-0" IN AREAS TO BE PLOWED DURING THE WINTER MONTHS. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
5. BACKFILL SHALL BE OF A SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED FOR BACKFILL WITHIN TWO FEET OF THE TOP OF THE PIPE.
6. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
7. SEWERS ON 20 PERCENT SLOPES OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS OR EQUIVALENT, SPACED AS FOLLOWS:
   A. NOT OVER 36 FEET CENTER TO CENTER ON GRADES 20 PERCENT AND UP TO 35 PERCENT
   B. NOT OVER 24 FEET CENTER TO CENTER ON GRADES 35 PERCENT AND UP TO 50 PERCENT
   C. NOT OVER 16 FEET CENTER TO CENTER ON GRADES 50 PERCENT AND OVER

SANITARY SEWER TRENCH DETAIL (2)

NOT TO SCALE



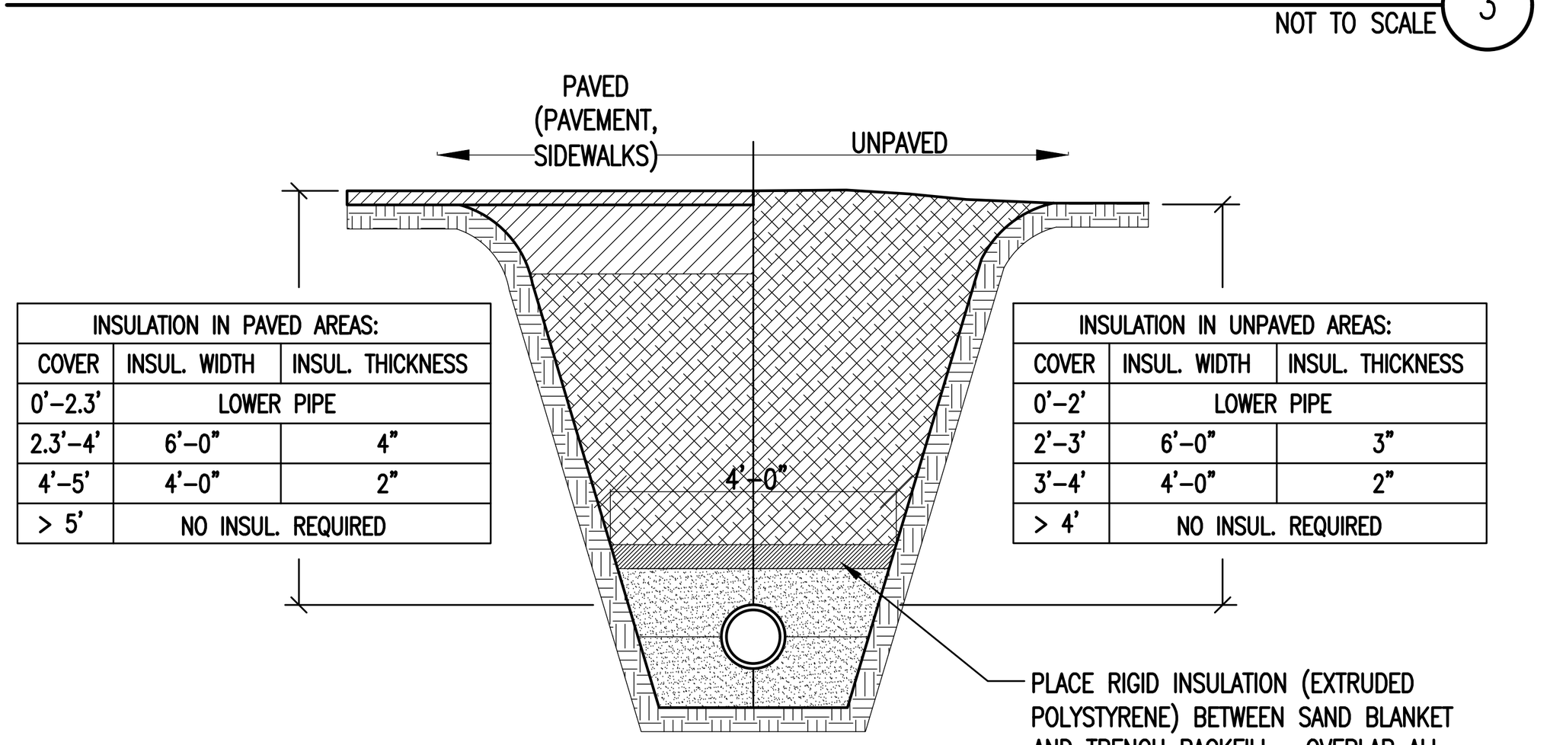
INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3.5'	LOWER PIPE	
3.5'-6'	6'-0"	4"
> 6'	NO INSUL. REQUIRED	

WATER INSULATION NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW WATER LINE DETAIL (3)

NOT TO SCALE



INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-2.3'	LOWER PIPE	
2.3'-4'	6'-0"	4"
4'-5'	4'-0"	2"
> 5'	NO INSUL. REQUIRED	

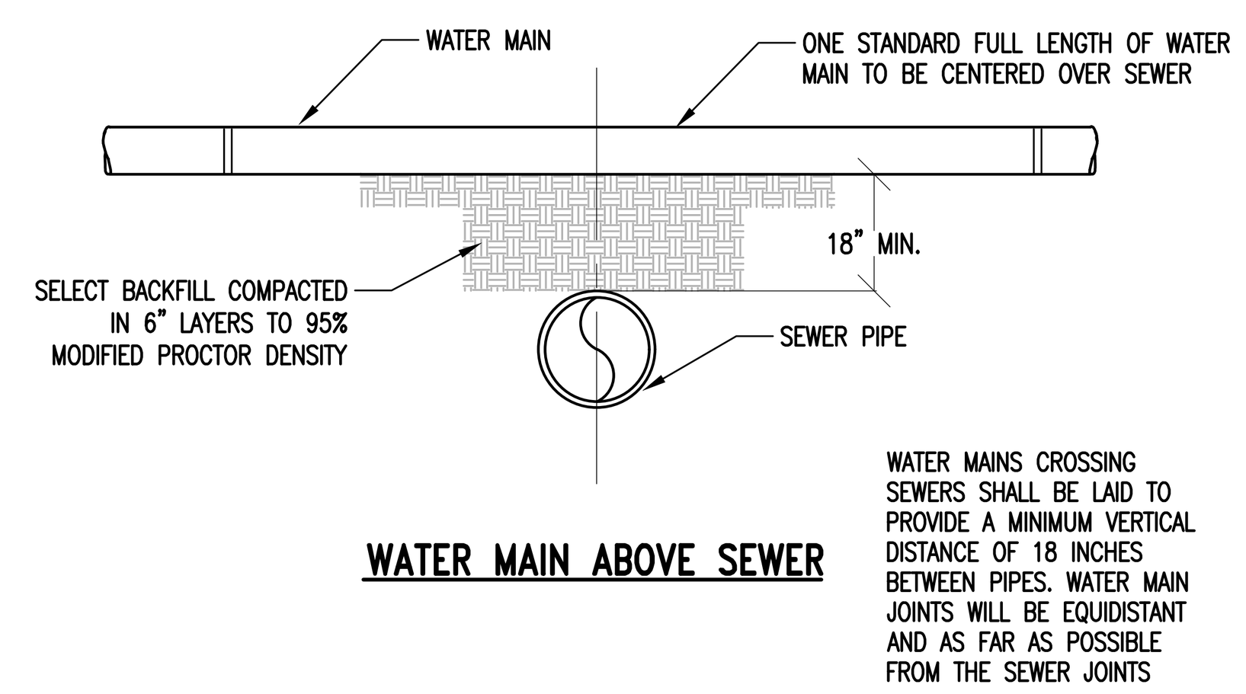
INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-2'	LOWER PIPE	
2'-3'	6'-0"	3"
3'-4'	4'-0"	2"
> 4'	NO INSUL. REQUIRED	

SANITARY INSULATION NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW SEWER LINE DETAIL (4)

NOT TO SCALE



WATER MAIN ABOVE SEWER

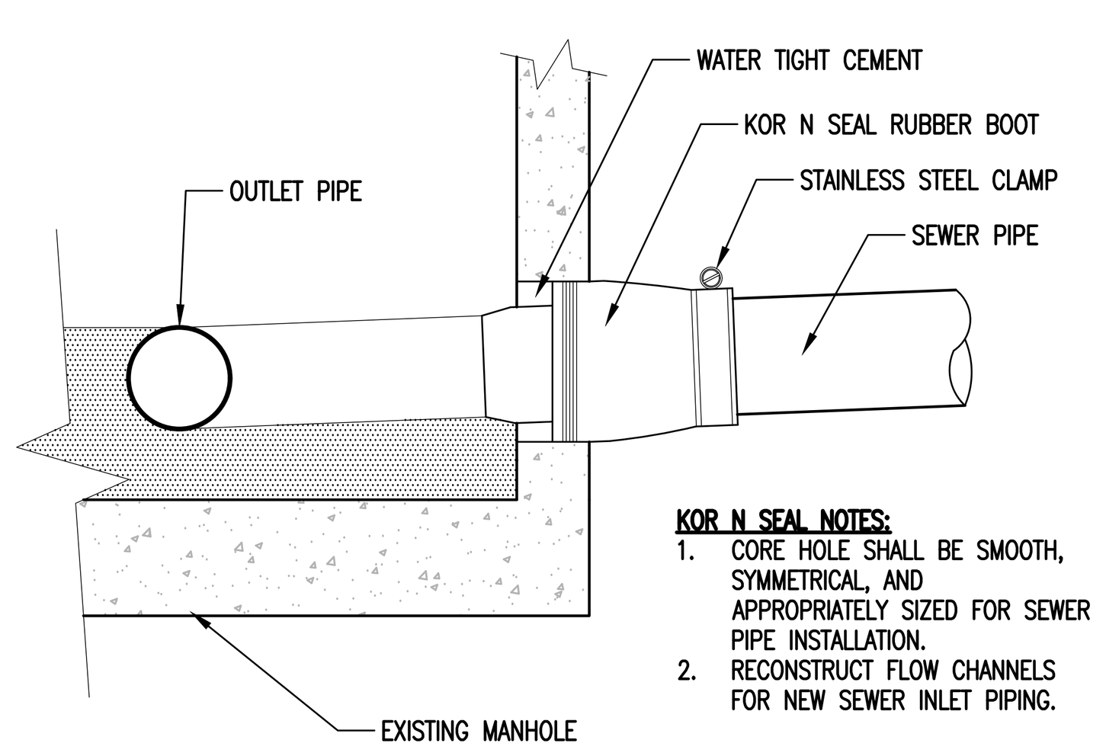
WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN PIPES. WATER MAIN JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER JOINTS

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH SECTION 8.6 OF APPENDIX A OF THE VERMONT WATER SUPPLY RULE.
2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS AND 5 FEET TO EXISTING AND PROPOSED STORMWATER LINES. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER OR STORMLINE.
3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN; 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS; 2) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICH EVER IS GREATER; 3) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 psi FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.

SEWER / WATER LINE CROSSING (5)

NOT TO SCALE



KOR N SEAL NOTES:

1. CORE HOLE SHALL BE SMOOTH, SYMMETRICAL, AND APPROPRIATELY SIZED FOR SEWER PIPE INSTALLATION.
2. RECONSTRUCT FLOW CHANNELS FOR NEW SEWER INLET PIPING.

MANHOLE CONNECTION DETAIL (6)

NOT TO SCALE

WATER/WASTEWATER DESIGN FLOW BASIS

2007 Rule Basis (WW-4-5139)

USE	Unit	Water Flow (gpd/unit)	WW Flow (gpd/unit)	Water Flows (gpd)	WW Flows (god)
Buildling 32					
Office	32 employees	15	15	432	384
Buildling 44					
Office	180 employees	15	15	2430	2160
Buildling 50					
Office	288 employees	15	15	3888	3456
Event	125 people	5	5	563	500
Resturant	185 seats	30	30	4995	4440
Beach Club	40 people	15	15	540	480
				12848	**11420**
				total water	**total ww**

2007 Flow Basis Notes:
Water flows reduced by 10% for use of low flow fixtures
Wastewater flows reduced by 20% for connection to municipal system

USE	Unit	2019 Rule Basis Water & WW Flow (gpd/unit)	Water & WW Flows (gpd/unit)	2019 Basis - 2007 Basis Delta Water (gpd)	Delta WW (gpd)
Buildling 32					
Office	32 employees	15	480	48	96
Buildling 44					
Office	180 employees	15	2700	270	540
Buildling 50					
Office	288 employees	15	4320	432	864
Event	125 people	4	500	-63	0
Resturant	185 seats	27	4995	0	555
Beach Club	40 people	4	160	-380	-320
			13155	**308**	**1735**
			total water, total ww	**gpd increase**	**gpd increase**

2019 Flow Basis Notes:
Office use assumes single shift without showers or cafeteria
Event space assumes no food service
Resturant use assumes 2 meals per day
Beach club applies "health club" use flows and assumes no showers

Building 32	Unit	Water & WW Flow (gpd/unit)	Water & WW Flows (gpd)
Ex. Office	32 employees	15	480
Prop. Office	64 employees	15	960
			480 gpd increase

WATER NOTES

WATER MAINS

1. PERFORM A HYDROSTATIC AND LEAKAGE TEST ACCORDING TO AWWA C600(LATEST REVISION) ON EACH PIPE LINE.
2. THE ENGINEER SHALL BE GIVEN AT LEAST 72 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.
3. SPECIFIED TEST PRESSURE IS A MINIMUM OF 200 PSI OR 1.5X THE WORKING PRESSURE, WHICHEVER IS GREATER, AND PRESSURE DURING TEST SHALL NOT VARY BY MORE THAN 5 PSI. SEE THE CURRENT EDITION OF AWWA C600 FOR ALLOWABLE LEAKAGE.

EXISTING UTILITIES

1. LOCATION OF UTILITY INSTALLATIONS AND UNDERGROUND STRUCTURES ARE SHOWN AS APPROXIMATE ON THE CONTRACT DOCUMENTS SOME UTILITIES MAY NOT BE SHOWN.
2. ALL UTILITIES SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.
3. EXISTING UTILITIES SHALL BE PROTECTED AND SUPPORTED DURING CONSTRUCTION.
4. ALL WATER, GAS, CABLE, TELEPHONE, ELECTRIC, SEWER, AND OTHER UTILITIES FOUND TO INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED IN A MANNER ACCEPTABLE TO THE ENGINEER, PRIOR TO COMMENCING DEMOLITION.

PIPE BEDDING

1. SAND BLANKET/BEDDING SHALL MEET REQUIREMENTS OF EARTHWORK SPECIFICATIONS
2. TRENCH FINAL BACKFILL MATERIAL – MATERIAL WILL EXCLUDE PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT, CLAY, LARGE ROCKS(GREATER THAN 12" DIMENSION), OR ANY MATERIAL DETERMINED BY THE ENGINEER THAT WILL NOT BE SUITABLE.

PIPE TRENCH BACKFILL

1. MEET EARTHWORK SPECIFICATIONS FOR PLACEMENT AND COMPACTION.

PVC PIPE (WATER)

1. PVC PIPE: AWWA C-900-07 (DR 14) AND SHALL BE UL AND FM APPROVED.
2. FITTINGS: DUCTILE IRON, STANDARD THICKNESS, 350 PSI PRESSURE RATING. (AWWA C110, C153, C105, ANSI A21.10)
3. FITTINGS: CAST IRON, 250 PSI PRESSURE RATING (ANSI A21.10)
4. JOINTS: MECHANICAL, PUSH-ON AND FLANGED (AWWA C111, C115.)
5. GASKETS: ALL GASKETS TO BE NITRILE UNLESS WAIVED BY THE ENGINEER.
6. MECHANICAL AND PUSH-ON JOINTS, ANSI A21.11.
7. FLANGED JOINTS: 1/8" THICK RING OR FULL FACED RUBBER, ANSI A21.15.
8. BOLTS/NUTS
9. MECHANICAL JOINT: ANSI A21.11.
10. FLANGED JOINT: ANSI A21.15.
11. MECHANICAL JOINT GLANDS SHALL BE "MEGA-LUG" RETAINER GLANDS.
12. "NON-BURIED UTILITY GATE VALVES SHALL BE PROVIDED WITH FLANGED ENDS AND HANDWHEELS UNLESS OTHERWISE NOTED."
13. LAYING PIPE
    A. PIPE SHALL BE LAID WITH BELL ENDS FACING IN THE DIRECTION OF LAYING.
    B. WHERE PIPE IS LAID ON A SLOPE OF 5% OR MORE, THE LAYING SHALL START AT THE LOW END AND PROCEED UPHILL, WITH THE BELL ENDS UPGRADE.
    C. A WATERTIGHT PLUG SHALL BE PLACED IN THE OPEN ENDS OF INSTALLED PIPE WHEN PIPE LAYING IS NOT IN PROGRESS.
    D. MAX. PERMISSIBLE DEFLECTION IS 75% OF AWWA SPEC. C600.

CHLORINATION OF DOMESTIC WATER LINES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE OF BEGINNING ANY DISINFECTION OF WATER MAINS
2. CONTRACTOR SHALL BE RESPONSIBLE FOR BACTERIOLOGICAL TESTING AS REQUIRED BY THIS SPECIFICATION AND REFERENCE STANDARDS MENTIONED.
3. DISINFECT ALL NEW PIPELINE SYSTEMS IN ACCORDANCE WITH AWWA C651, INCLUDING:
    A. METHOD OF CHLORINE APPLICATION. USE CONTINUOUS FEED METHOD OR SLUG METHOD (TABLET METHOD IS NOT ACCEPTABLE).
    B. FORM OF CHLORINE UTILIZED.
    C. FINAL FLUSHING.
    D. BACTERIOLOGICAL TESTING
    E. REPETITION OF PROCEDURE

GATE VALVES

1. RESILIENT SEAT GATE VALVES BY KENNEDY "KEN-SEAL" OR EQUAL.
2. IRON BODY GATE VALVES TO MEET AWWA C-509-87.
3. STEM CONSTRUCTION: NON-RISING.
4. STEM SEALS: DOUBLE O-RING.
5. GATE: CAST IRON RESILIENT WEDGE WITH SYNTHETIC ELASTOMER COATING, AND SHALL BE EPOXY COATED (FUSION BONDED) INSIDE AND OUT.
6. BONNET HARDWARE SHALL MEET ASTM A307, CADMIUM PLATED.
7. OUTLET CONNECTION: STANDARD MECHANICAL JOINT
8. OPERATION: OPEN RIGHT.

TAPPING SLEEVES AND VALVES

TAPPING VALVES

1. TAPPING VALVES TO MEET ANSI/AWWA C509-87, STANDARD FOR RESILIENT SEATED GATE VALVES.
2. VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI.
3. VALVES SHALL OPEN RIGHT.
4. INLET FLANGES SHALL BE CLASS 125, ANSI B16.1, OR ANSI/AWWA C110/A21.10.
5. OUTLET CONNECTION: STANDARDIZED MECHANICAL JOINT.
6. STEM SEALS: O RING.
7. STEM CONSTRUCTION: NON-RISING.
8. SEATING: PARALLEL SEAT
9. END CONNECTIONS: MECHANICAL ON RUN, FLANGED ON BRANCH.
10. BURIED TAPPING VALVES SHALL BE PROVIDED WITH A 2 INCH SQUARE WRENCH NUT AND CAST IRON VALVE BOX. IF DEPTH FROM GRADE TO TOP OF VALVE OPERATING NUT IS GREATER THAN 6'-0 , A VALVE STEM RISER MADE OF HIGH STRENGTH STEEL SHALL BE PROVIDED. DEPTH FROM VALVE STEM RISER NUT TO GRADE WILL BE 4 TO 6 FEET.

TAPPING SLEEVES

1. AWWA C509, LATEST REVISION.
2. AWWA C207, CLASS D, MAX. WORKING PRESSURE OF 150 PSI.
3. SLEEVES: SPLIT SLEEVES OF CAST IRON OR DUCTILE IRON.
4. MECHANICAL JOINT ENDS WITH END AND GASKET SEALS.
5. BOLTS AND NUTS, MECHANICAL JOINTS: HIGH STRENGTH CAST IRON OR HIGH STRENGTH LOW ALLOY STEEL, ANSI/AWWA C111/A21.11-90.
6. BOLTS AND NUTS, FLANGED JOINTS: HIGH STRENGTH, LOW CARBON STEEL CONFORMING TO ANSI/AWWA C110/A21.10-87, APPENDIX
7. COAT ALL NUTS AND BOLTS WITH A RUST RESISTANT LUBRICANT.
8. ALL BOLTS AND NUTS USED WITH PIPE SLEEVES SHALL BE BRUSH COATED HEAVILY AFTER FINAL TIGHTENING WITH BITUMASTIC COLD-APPLIED MATERIAL TO THOROUGHLY COVER ALL EXPOSED SURFACES OF BOLTS AND NUTS.

VALVE BOXES

1. ACCEPTABLE MANUFACTURER'S: MUELLER, CLOW, OR EQUAL.
2. CLOW F-2452 SLIDING TYPE, TWO PIECE, OR EQUAL.
3. 5 ¼ INCH SHAFT.
4. SIZE 664-A (40-60 INCH OVERALL LENGTH).
5. CAST IRON.
6. CLOW F-2490 LIDS OR EQUAL.
7. THE WORD "WATER" TO BE CAST INTO TOP OF COVERS, AND ARROW SHOWING DIRECTION OF OPENING.

CONCRETE

1. CONCRETE SHALL HAVE:
    A. MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS
    B. AIR ENTRAINMENT OF 4% TO 6% BY VOLUME.
    C. WATER CEMENT RATIO OF 0.49 LBS. WATER/CEMENT.
    D. SLUMP OF 2 TO 4 INCHES.
2. CONCRETE SHALL NOT BE PLACED WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT OR MORE THAN 90 DEGREES FAHRENHEIT.
3. CONCRETE SHALL NOT BE DROPPED MORE THAN SIX FEET INSIDE A FORM.
4. MAINTAIN TEMPERATURE OF CONCRETE SURFACE AT MINIMUM 50 DEGREES FAHRENHEIT FOR 72 HOURS AFTER PLACING CONCRETE. PREHEAT ALL ENCLOSURES FOR A MINIMUM OF 2 HOURS TO PROVIDE A MIN. SURFACE TEMPERATURE OF 45 DEGREES FAHRENHEIT.
5. ALLOW TO SET AND CURE ALL THRUST BLOCKS, CONCRETE SUPPORTS, AND ANCHORS A MINIMUM OF 24 HOURS BEFORE BACKFILLING.
6. COMPLETELY CURE AND SET CONCRETE BEFORE ANY HYDROSTATIC OR LEAKAGE TESTING OF PIPELINE SYSTEMS.
7. NONSHRINK GROUT SHALL BE HALCO TRADEMARK, AS MANUFACTURED BY LEHN & FINK INDUSTRIAL PRODUCTS.
8. DO NOT PLACE ANY MORTAR OR GROUT WHEN AMBIENT TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT.
9. MORTAR FOR MANHOLES SHALL CONSIST OF THE FOLLOWING:
    A. CEMENT-TYPE II, ASTM C150.
    B. HYDRATED LIME-TYPE N, ASTM C207.
    C. SAND- ASTM C 33, FINE AGGREGATES FOR CONCRETE.
    D. WATER-CLEAN, SUITABLE FOR DRINKING.
10. MIX(BY VOLUME): 1 PART CEMENT, ½ PART LIME, 4 ½ PARTS SAND.

GENERAL

1. CONTRACTOR SHALL NOTIFY BURLINGTON DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS BEFORE BEGINNING WATER LINE WORK..
2. "AS BUILT" DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AT THE TIME OF COMPLETION OF THE SYSTEM.

SANITARY SEWER NOTES

CONTRACTOR SHALL CONFORM TO GUIDELINES DETAILED IN THE VERMONT STATE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR READING AND FOLLOWING THE FULL COMPLETE EDITION PROVIDED BY THE STATE.

A. THE BUILDING SEWER SHALL BE CONSTRUCTED IN A MANNER WHICH WILL PREVENT LEAKING, BREAKING OR CLOGGING.

B. SIZING AND SLOPE: MINIMUM BUILDING SEWER SIZE IS 4 INCHES (UNLESS SHOWN ON THE PLAN) AND A MINIMUM SLOPE IS 1/8" PER FOOT.

C. CLEANOUTS: CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL CHANGE IN DIRECTION OF THE BUILDING SEWER GREATER THAN 45 DEGREES AND WHERE INDICATED ON THE DESIGN DRAWINGS. BUILDING SEWER CHANGES IN DIRECTION WHICH EXCEED 45 DEGREES SHOULD BE MADE WITH TWO 45 DEGREE ELLS OR LONG SWEEP FITTINGS. MANHOLES ARE ACCEPTABLE IN LIEU OF CLEANOUTS. WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH OF LESS THAN 3 FEET UNDER DRIVEWAYS ARE ANTICIPATED, EXTRA HEAVY CAST IRON PIPE SHALL BE USED.

D. LEAKAGE: BUILDING SEWERS SHALL MEET THE LEAKAGE STANDARDS PRESCRIBED IN THE STATE OF VERMONT SPECIFICATIONS (EPR- CHAPTER 1). SEE BELOW FOR MORE DETAIL.

E. SLOPE, VELOCITY: ALL GRAVITY SEWER LINES SHALL BE INSTALLED WITH NOT LESS THAN THE SLOPES SHOWN BELOW:

PIPE SIZE (INCHES)	SLOPE (FEET/100 FEET)
4"	2%
6"	1%
8"	0.4%

F. CHANGES IN PIPE SIZE: WHEN A SMALLER SEWER JOINS A LARGE ONE, THE INVERT OF THE LARGER SEWER SHALL BE LOWERED SUFFICIENTLY TO MAINTAIN THE SAME ENERGY GRADIENT.

G. MATERIAL: PVC SDR 35, ASTM D3034, WITH PUSH-ON GASKETED JOINTS. GASKETS SHALL CONFORM TO ASTM D3212. SEWER JOINTS SHALL BE CONSTRUCTED TO MINIMIZE INFILTRATION AND TO PREVENT THE ENTRANCE OF ROOTS INTO THE SYSTEM.

H. TRENCHING: LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.

I. BEDDING: SEE TRENCH DETAIL DRAWING FOR MATERIALS. TRENCH BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL FREE FROM DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS.

J. LEAKAGE TESTS: UPON COMPLETION OF SEWER LINE CONSTRUCTION, THE SEWER LINE SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF VERMONT SPECIFICATIONS (EPR – CHAPTER 1, APPENDIX "A").

LEAKAGE TESTS FOR GRAVITY SEWERS

PERFORM A PRESSURIZED AIR TEST ON THE GRAVITY LINE IN ACCORDANCE WITH THE VERMONT ENVIRONMENTAL PROTECTION RULES ON EACH SECTION OF THE GRAVITY SEWER. THE ENGINEER SHALL BE GIVEN 72 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.

PLUG ALL OPENINGS IN THE TEST SECTION. ADD AIR UNTIL THE INTERNAL PRESSURE OF THE LINE IS RAISED TO APPROXIMATELY 4.0 POUNDS/SQUARE INCH (PSI) GREATER THAN THE AVERAGE PRESSURE OF ANY GROUND WATER. AFTER THIS PRESSURE IS REACHED, ALLOW THE PRESSURE TO STABILIZE. THE PRESSURE WILL NORMALLY DROP AS THE AIR TEMPERATURE STABILIZES. THIS USUALLY TAKES 2 TO 5 MINUTES DEPENDING ON THE PIPE SIZE. THE PRESSURE MAY BE REDUCED TO 3.5 PSI BEFORE STARTING THE TEST.

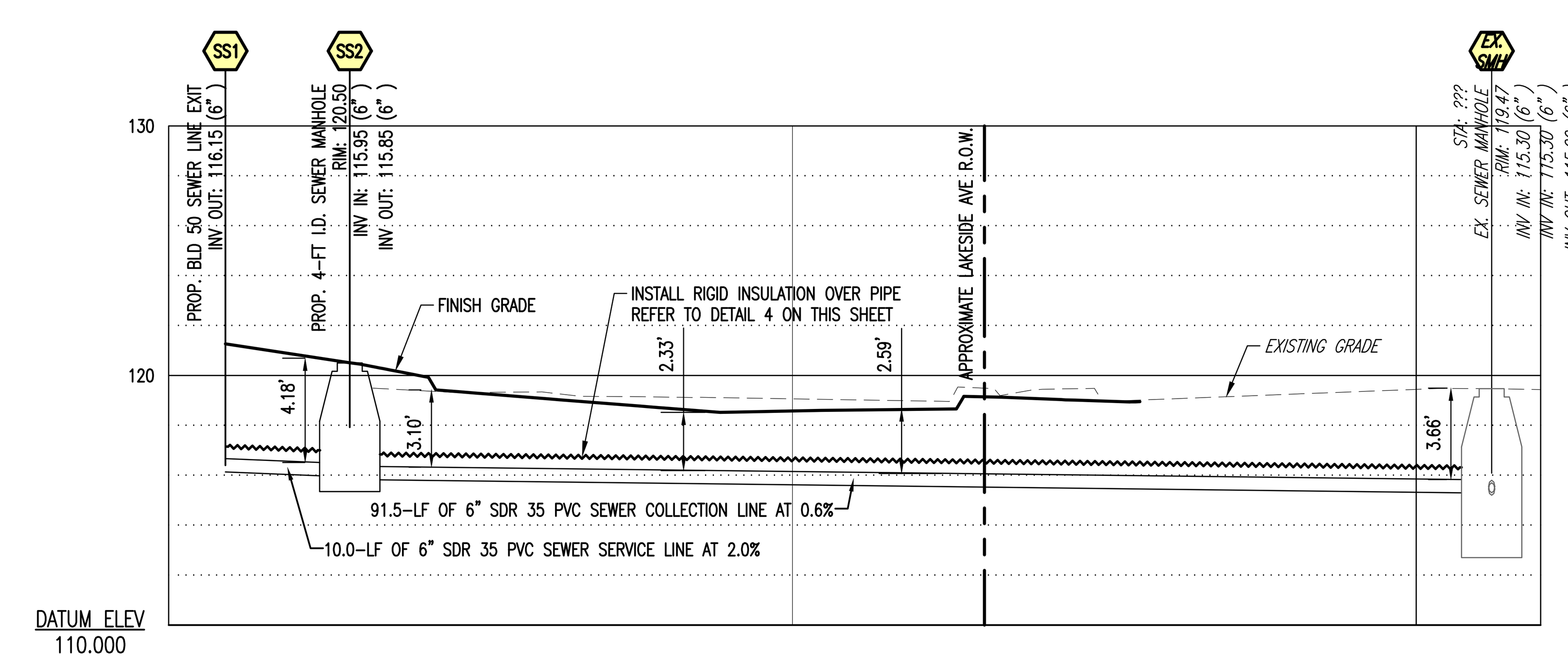
WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE THE STARTING TEST PRESSURE OF 3.5 PSI ABOVE THE PIPE, START THE TEST. IF THE PRESSURE DROPS MORE THAN 1.0 PSI DURING THE TEST TIME, THE LINE IS PRESUMED TO HAVE FAILED THE TEST. IF A 1.0 PSI DROP DOES NOT OCCUR WITHIN THE TEST TIME, THE LINE HAS PASSED THE TEST. THE TEST TIME SHALL BE DERIVED FROM THE FOLLOWING TABLE. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO ARRIVE AT THE TOTAL TEST TIME FOR THE SECTION.

PIPE SIZE (IN)	T (TIME) (MIN./100FT)
3	0.2
4	0.3
6	0.7
8	1.2

K. INSTALLATION: PIPE SHALL BE LAID WITH BELL ENDS FACING UPGRADE AND LAYING SHALL START AT THE DOWNGRADE END.

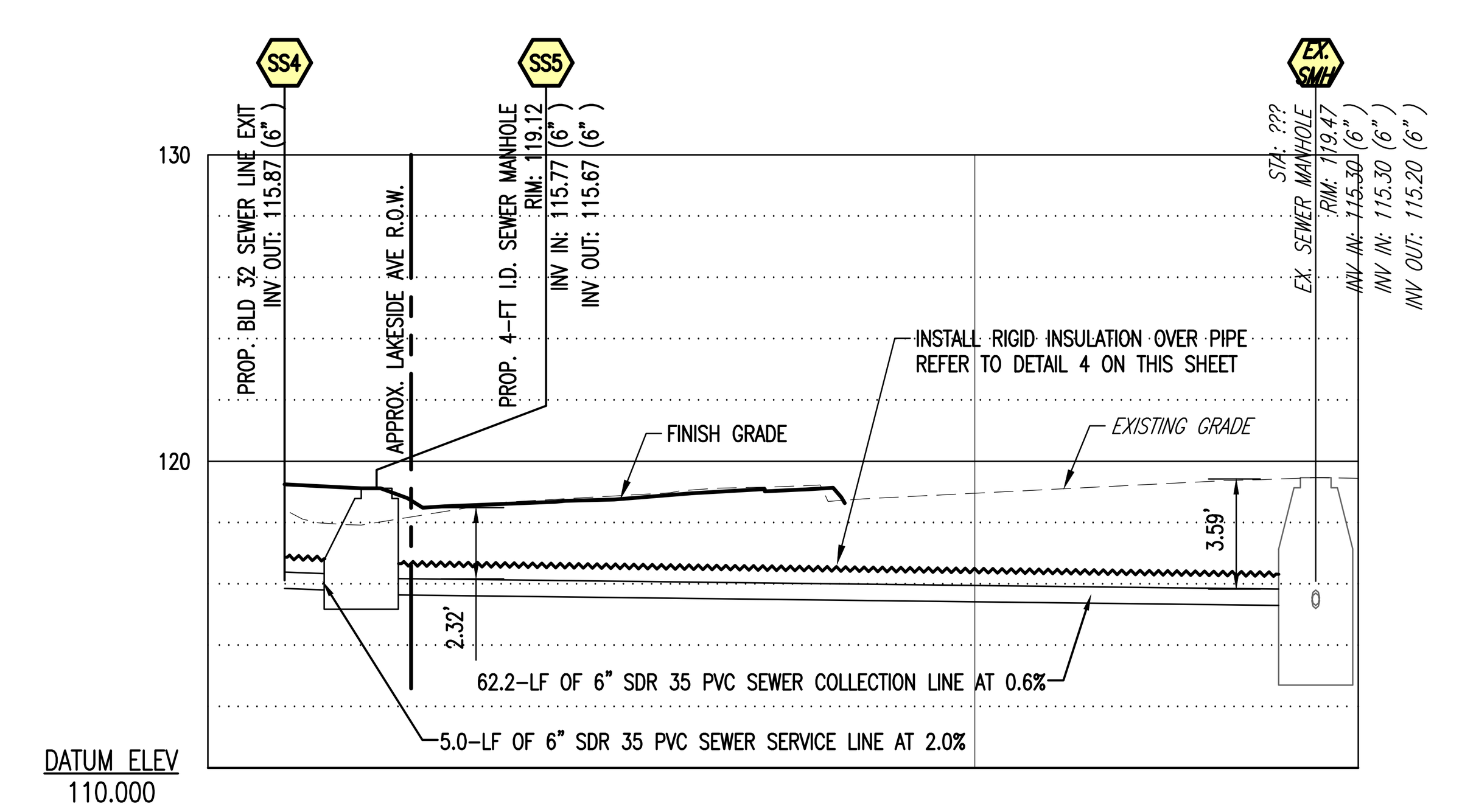
L. WATER LINE SEPARATION
1. HORIZONTAL SEPARATION: SEWERS SHALL BE LAID FLAT AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WHERE IMPOSSIBLE OR IMPRACTICABLE TO MAINTAIN THE TEN FOOT SEWER/WATER PIPE HORIZONTAL SEPARATION, (DUE TO LEDGE, BOULDERS OR OTHER UNUSUAL CONDITIONS) THE WATER LINE MAY BE IN A SEPARATE TRENCH OR ON AN EARTH SHELF IN THE SEWER TRENCH PROVIDED THAT THE BOTTOM OF THE WATER LINE IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHEREVER IMPOSSIBLE OR IMPRACTICAL TO MAINTAIN THE 18 INCH VERTICAL SEPARATION, THE SEWER LINE SHALL BE CONSTRUCTED USING PRESSURE PIPE TO NORMAL WATER LINE STANDARDS AND PRESSURE TESTED TO 50 PSI FOR 15 MINUTE PRIOR TO BACKFILLING.
2. CROSSINGS: SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18 INCH VERTICAL SEPARATION;
   2.1. THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AWAY AS POSSIBLE FROM WATER JOINTS;
   2.2. THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER;
   2.3. THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS;
   2.4. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

M. MANHOLES
1. DIAMETER: THE MINIMUM DIAMETER OF MANHOLES SHALL BE 48 INCHES; LARGE DIAMETERS ARE PREFERRED FOR CONNECTION TO LARGE DIAMETER SEWERS. A MINIMUM ACCESS DIAMETER OF 24 INCHES SHALL BE PROVIDED.
2. FLOW CHANNEL: FLOW CHANNELS SHALL BE PROVIDED IN THE BASE OF ALL MANHOLES AND THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE MADE TO CONFORM IN SHAPE AND SLOPE TO THAT OF THE SEWERS.
3. MANHOLES SHALL BE OF THE PRE-CAST CONCRETE OR POUR-IN PLACE CONCRETE TYPE. MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR.
4. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A RUBBER-GASKETED FLEXIBLE WATERTIGHT CONNECTION THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL TO TAKE PLACE.
5. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE. LEAKAGE TESTING OF GRAVITY SEWERS UTILIZING THE WATER TESTING PROCEDURES TAKES INTO ACCOUNT THE LEAKAGE FROM ONE MANHOLE IN THE TEST SECTION. OTHERWISE, MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:
   5.1. AFTER THE MANHOLE HAS BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED WITH AND POINTED WITH AN APPROVED NON-SHRINKING MORTAR. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED AND THE PLUGS PLACED TO PREVENT BLOWOUT.
   5.2. EACH MANHOLE SHALL BE CHECKED FOR INFILTRATION BY FILLING WITH WATER TO THE TOP OF THE CONE SECTION. A STABILIZATION PERIOD OF ONE HOUR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, IF NECESSARY, AND THE MEASURING TIME OF AT LEAST SIX HOURS BEGUN. AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE MEASURING THE VOLUME OF WATER ADDED. THIS AMOUNT SHALL BE CONVERTED TO A 24 HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF DEPTH. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE GALLON PER VERTICAL FOOT FOR A 24 HOUR PERIOD FOR EXFILTRATION AND THERE SHALL BE NO VISIBLE INFILTRATION. IF AN AIR TEST IF PERFORMED ON THE MANHOLE, INSTEAD OF THE WATER TEST, THE MANHOLE SHALL REMAIN UN-BACKFILLED DOWN TO THE SEWER LINE INVERTS DURING THE AIR TEST.



BUILDLING 50 SEWER LINE PROFILE

SCALE: HORIZ. 1" = 10'
VERT.: 1" = 5'



BUILDLING 32 SEWER LINE PROFILE

SCALE: HORIZ. 1" = 10'
VERT.: 1" = 5'

SMITH
ALVAREZ
SIENKIEWYCZ
ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington,VT
05401
P: 802 • 863 • 2227
F: 802 • 863 • 0093

CONSULTANTS

CIVIL
ENGINEERING VENTURES
208 FLYNN AVE, SUITE 2A
BURLINGTON, VT 05401
P: 802-863-6225
F: 802-863-6306

LANDSCAPE
DISTINCTIVE LANDSCAPING
211 GREENBUSH ROAD
CHARLOTTE, VT 05445
P: 802-425-2877
F: 802-425-2797

STRUCTURAL
ARTISAN ENGINEERING
120 GRAHAM WAY, SUITE 124
SHELBURNE, VT 05482
P: 802-497-3531

MECHANICAL/ ELECTRICAL
LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

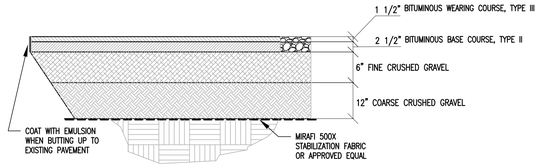
HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

REVISIONS

Water & Sanitary Details

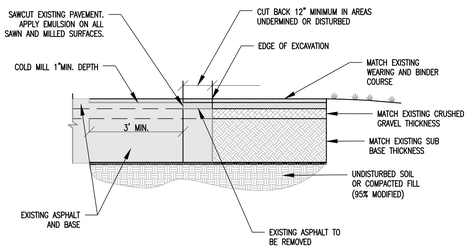
C2.0



PAVEMENT NOTES:
1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. COMPACT ALL FILL MATERIAL TO 95% MODIFIED PROCTOR DENSITY.

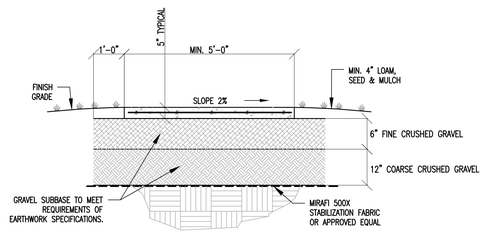
TYPICAL PAVEMENT DETAIL

NOT TO SCALE — 1



TYPICAL PAVEMENT PATCH DETAIL

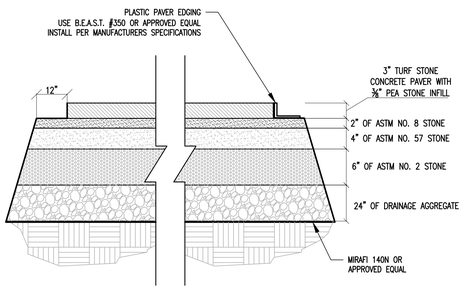
NOT TO SCALE — 2



CONCRETE SIDEWALK NOTES:
1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH AT MINIMUM 4'-0"oc. OR AS NOTED ON PLANS.
2. PLACE EXPANSION JOINT EVERY 20'-0".
3. REFER TO ARCHITECTURAL PLAN SHEET L-1.0 FOR FINISH & COLOR.
4. TREAT WITH SILANE-SILOXANE OR EQUAL.
5. CAST-IN-PLACE CONCRETE TO BE 4,500 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH 6x6-W4.0xW4.0 REINFORCING CENTERED IN SIDEWALK.
6. WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD.
7. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD, LIGHT BASE OR OTHER HARD FEATURES, ½" EXPANSION MATERIAL SHALL BE INSTALLED BETWEEN FEATURE & SIDEWALK.

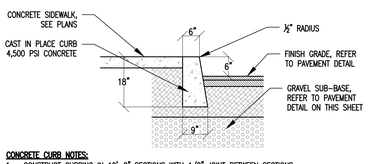
CONCRETE SIDEWALK DETAIL

NOT TO SCALE — 6



PERMEABLE PAVER DETAIL

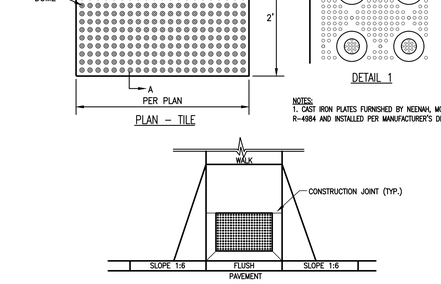
NOT TO SCALE — 3



CONCRETE CURB NOTES:
1. CONSTRUCT CURBING IN 10'-0" SECTIONS WITH 1/8" JOINT BETWEEN SECTIONS
2. EXPANSION JOINTS AT 20'-0 oc., MAX
3. GRANITE CURBS SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT AND STATE SPECIFICATIONS
3. WHERE CURB IS ADJACENT TO SIDEWALK, BOLLARD, LIGHT BASE OR OTHER HARD FEATURES, ½" EXPANSION MATERIAL (FULL DEPTH OF CURB), SHALL BE INSTALLED BETWEEN FEATURE & CURB.

CONCRETE CURB DETAIL

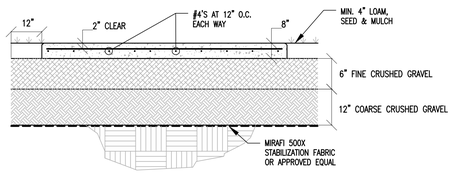
NOT TO SCALE — 9



NOTES:
1. CAST IRON PLATES FURNISHED BY NEENAH, MODEL R-4984 AND INSTALLED PER MANUFACTURER'S DIRECTION.

DETECTABLE WARNING PLATE DEATIL

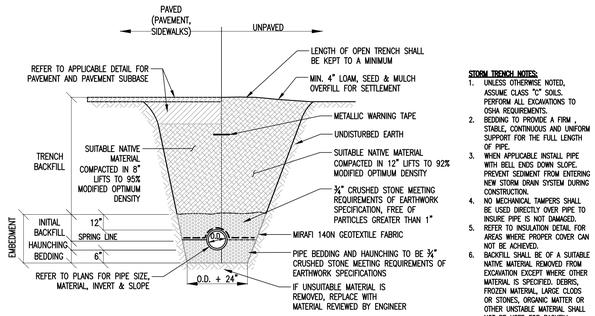
NOT TO SCALE — 7



EXTERIOR CONCRETE PAD NOTES:
1. CONCRETE TO BE 4,500psi WITH 5-7% AIR ENTRAINMENT.
2. REFER TO ARCHITECTURAL PLAN SHEET L-1.0 FOR FINISH & COLOR.
3. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
4. REFER TO SITE PLAN FOR SIZE AND LOCATION.

EXTERIOR CONCRETE PAD/VEHICULAR CONCRETE DETAIL

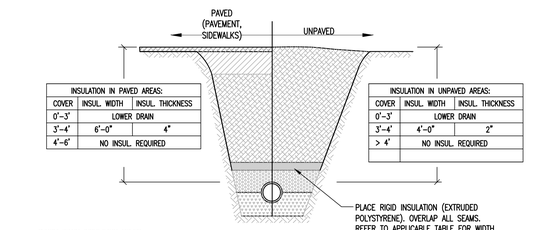
NOT TO SCALE — 5



STORM TRENCH NOTES:
1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM , STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW STORM DRAIN SYSTEM DURING CONSTRUCTION.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. REFER TO INSULATION DETAIL FOR AREAS WHERE PROPER COVER CAN NOT BE ACHIEVED.
6. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSUITABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.

TYPICAL STORM DRAIN TRENCH

NOT TO SCALE — 1



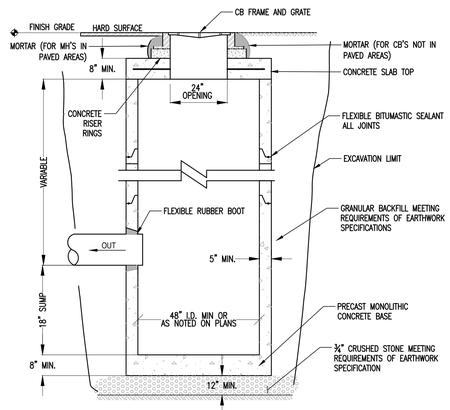
INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3'	LOWER DRAIN	
3'-4'	6'-0"	4"
4'-6'	NO INSUL. REQUIRED	

INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3'	LOWER DRAIN	
3'-4'	4'-0"	2"
> 4'	NO INSUL. REQUIRED	

STORM DRAIN INSULATION NOTES:
1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW DRAIN DETAIL

NOT TO SCALE — 2



CATCH BASIN NOTES:
1. PROVIDE AN EAST JORDAN IRONWORKS 24"x24" TYPE E OR EQUAL, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS.
2. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.

CATCH BASIN DETAIL

NOT TO SCALE — 7

EARTHWORK SPECIFICATIONS

1. PRIOR TO THE START OF THE WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CITY DPW, CONSTRUCTION ADMINISTRATOR, CONTRACTOR, OWNER & PROJECT ENGINEERS TO REVIEW PROCEDURES, IDENTIFY RESPONSIBILITIES. UNLESS STATED OTHERWISE, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE APPLICABLE STATE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CLEARING AND GRUBBING– ALL TOPSOIL AND UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE DRIVEWAY, PARKING LOT, AND SIDEWALK LIMITS. THE DRIVEWAY AND PARKING LOT BASE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.
3. BASE COURSE– THE BASE COURSE SHALL CONSIST OF TWELVE INCHES OF GRAVEL AND SIX INCHES OF CRUSHED GRAVEL. GRADATION CURVES COMPLYING WITH AASHTO T27 AND T11 SHALL BE PROVIDED FOR THE ENGINEERS REVIEW PRIOR TO CONSTRUCTION.
4. COMPACTION SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY AASHTO T238 METHOD AND SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DENSITY DETERMINED IN ACCORDANCE WITH AASHTO T99.
5. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 1000 SQUARE FEET OF AREA.
6. PAVEMENT SHALL MEET APPLICABLE STATE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REQUIREMENTS, IN ADDITION TO APPLICABLE TOWN ROAD STANDARDS.
7. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.
8. ALL REMAINING DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS.
9. THE SEEDING OF SLOPES AND DITCHES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.
10. COST OF INITIAL INSPECTION AND TESTING SHALL BE PAID BY THE OWNER. SUBSEQUENT TESTING DUE TO FAILURE SHALL BE PAID BY THE CONTRACTOR.
11. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL, REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL BEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	2 INCHES	100
	1-½ INCHES	90 – 100
	½ INCHES	70 – 100
	NO. 4	60 – 100
	NO. 100	0 – 20
	NO. 200	0 – 8
B. ¾" CRUSHED STONE:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	½ INCH	100
	⅜ INCH	85 – 100
	NO. 4	10 – 30
	NO. 8	0 – 10
	NO. 16	0 – 5
C. ¾" CRUSHED STONE:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	1 INCH	100
	¾ INCHES	90 – 100
	⅜ INCHES	20 – 55
	NO. 4	0 – 10
	NO. 8	0 – 5
D. COARSE CRUSHED GRAVEL:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	NO. 4	20 – 60
	NO. 100	0 – 12
	NO. 200	0 – 6
E. FINE CRUSHED GRAVEL:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	2 INCHES	100
	1-½ INCHES	90 – 100
	NO. 4	30 – 60
	NO. 100	0 – 12
	NO. 200	0 – 6
F. GRANULAR BACKFILL:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	3 INCHES	100
	NO. 4	45 – 75
	NO. 100	0 – 12
	NO. 200	0 – 6
G. DRAINAGE AGGREGATE:	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	1 1/2 INCH	100
	1 INCH	95 – 100
	¾ INCH	25 – 60
	NO. 4	0 – 10
	NO. 8	0 – 5
H. RIVERSTONE:	HARD, ROUNDED STONE MATERIAL MEETING THE FOLLOWING GRADATION:	
	SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
	2 INCH	100
	1 1/2 INCH	0 – 5

I. TYPE I STONE: THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 TO 12-INCHES, AND AT LEAST 50% OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 4-INCHES.

J. TYPE II STONE: THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 2 TO 36-INCHES, AND AT LEAST 50% OF THE VOLUME OF STONE IN PLACE SHALL HAVE A MINIMUM DIMENSION OF 12-INCHES.

SMITH ALVAREZ SIENKIEWYCZ
ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington, VT
05401
P: 802 • 863 • 2227
F: 802 • 863 • 0093

CONSULTANTS

CIVIL
ENGINEERING VENTURES
208 FLYNN AVE, SUITE 2A
BURLINGTON, VT 05401
P: 802-863-6225
F: 802-863-6306

LANDSCAPE
DISTINCTIVE LANDSCAPING
211 GREENBUSH ROAD
CHARLOTTE, VT 05445
P: 802-425-2877
F: 802-425-2797

STRUCTURAL
ARTISAN ENGINEERING
120 GRAHAM WAY, SUITE 124
SHELBURNE, VT 05482
P: 802-497-3531

MECHANICAL/ ELECTRICAL
LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

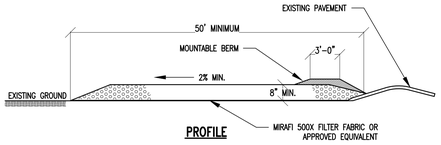
HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

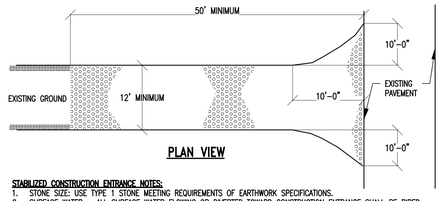
REVISIONS

Site & Stormwater Details

C2.1



PROFILE



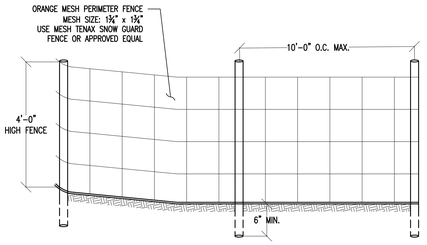
PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE TYPE 1 STONE MEETING REQUIREMENTS OF EARTHWORK SPECIFICATIONS.
2. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

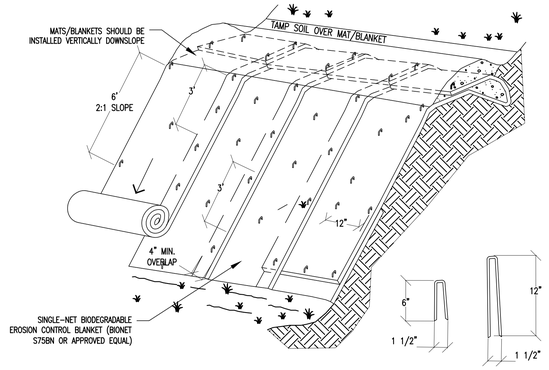
STABILIZED CONSTRUCTION ENTRANCE DEATIL

NOT TO SCALE 1

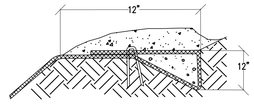


ORANGE CONSTRUCTION FENCE DETAIL

2 3



STAPLES



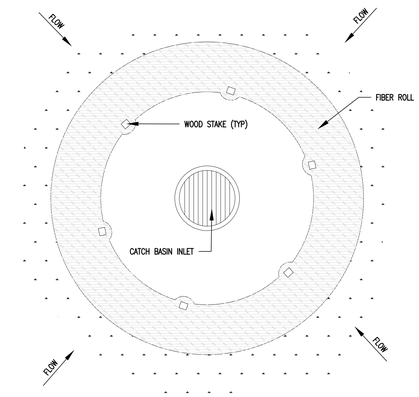
BERM

EROSION CONTROL MATTING NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS.
2. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

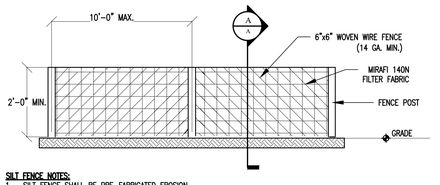
EROSION CONTROL MATTING DETAIL

NOT TO SCALE 5



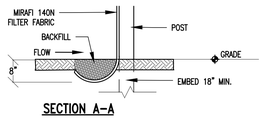
FIBER ROLL INLET PROTECTION DETAIL

NOT TO SCALE 3



SILT FENCE NOTES:

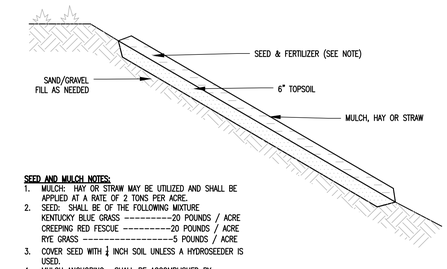
1. SILT FENCE SHALL BE PRE-FABRICATED EROSION CONTROL FENCE BY MIRAFI OR APPROVED EQUIVALENT, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
2. CONSTRUCTED IN PLACE SILT FENCE:
   A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
   B. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE TIES SPACED EVERY 24" AT TOP OF MID SECTION.
   C. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
3. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE
4. PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.



SECTION A-A

SILT FENCE DETAIL

NOT TO SCALE 6



SEED AND MULCH NOTES:

1. MULCH: HAY OR STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.
2. SEED: SHALL BE OF THE FOLLOWING MIXTURE
   KENTUCKY BLUE GRASS ----------20 POUNDS / ACRE
   CREEPING RED FESCUE ----------20 POUNDS / ACRE
   RYE GRASS ----------5 POUNDS / ACRE
3. COVER SEED WITH ¼ INCH SOIL UNLESS A HYDROSEEDER IS USED.
4. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
5. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.
6. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.

SEEDED & MULCHED AREAS DETAIL

NOT TO SCALE 7

URBAN MIX GRASS SEED– FOR USE IN GRASSED LAWN AREAS AROUND BUILDING & PARKING		
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED
37.5	45.0	CREEPING RED FESCUE
31.25	37.5	KENTUCKY BLUEGRASS
31.25	37.5	WINTER HARDY, PERENNIAL RYE
100	120.0 # LIVE SEED/ ACRE	

CONSERVATION MIX GRASS SEED– FOR USE IN ALL OTHER AREAS		
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED
35	77.0	CREEPING RED FESCUE
20	44.0	KENTUCKY BLUE GRASS
15	33.0	CUTTER PERENNIAL RYE GRASS
15	33.0	ANNUAL RYE GRASS
10	22.0	TALL FESCUE
5	11.0	WHITE CLOVER
100	220.0 # LIVE SEED/ACRE	

FERTILIZER– 10 LBS. PER 1000S.F.
SPRING SEEDING
FALL SEEDING

LIME– 90 LBS. PER 1000S.F.
DOLOMITIC GROUND LIMESTONE
NOT LESS THAN 85% OF THE TOTAL CARBONATE

TOP SOIL
6" MINIMUM APPROVED TOPSOIL

STRAW MULCH– 2 BALES PER 1000S.F.
APPLY BINDER OR NETTING AS NEEDED

SEED SPECIFICATION

NOT TO SCALE 8

EPSC NOTES

1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
2. THE CONTRACTOR SHALL CALL 802-863-4501 OR EMAIL GJOHNSON@BURLINGTON.GOV AT LEAST 24-HOURS PRIOR TO ANY EARTH DISTURBING ACTIVITIES AND SUBMIT THE NAME AND CONTACT INFORMATION (CELL PHONE AND EMAIL) OF THE ON-SITE EROSION CONTROL COORDINATOR FOR THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR POSTING THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN NOTICE IN A VISIBLE LOCATION AT ALL TIMES DURING EARTH DISTURBANCE.
3. EARTH DISTURBANCE SHALL BE LIMITED TO A MAXIMUM OF 2-AC AT ANY ONE TIME. EXCEPTIONS THAT DO NOT CONTRIBUTE TO CONCURRENT DISTURBANCE INCLUDE SELF-CONTAINED EXCAVATIONS AND DISTURBANCES THAT HAVE BE TEMPORARILY STABILIZED.
4. DISTURBANCE LIMITS ARE TO BE MARKED, AND THE FOLLOWING MANAGEMENT PRACTICES INSTALLED, PRIOR TO BEGINNING EARTHWORK IN ANY GIVEN AREA; SILT FENCE, CONSTRUCTION ENTRANCE, INLET PROTECTION & TREE PROTECTION FENCING.
5. COMPLY WITH VERMONT STATE GENERAL CONSTRUCTION PERMIT CONDITIONS. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE "VERMONT DEC LOW RISK SITE HANDBOOK FOR EROSION PREVENTION & SEDIMENT CONTROL", DATED 2020.
6. DURING THE NON-WINTER CONSTRUCTION SEASON, ALL DISTURBED AREAS ARE TO BE STABILIZED (TEMPORARY OR FINAL) WITHIN 14-DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE WITHIN THIS WORK AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
   A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD
   B. WORK IS OCCURRING WITHIN A SELF-CONTAINED EXCAVATION, 2-FEET OR MORE IN DEPTH.
6. THE PERIOD BETWEEN NOVEMBER 1ST AND APRIL 15TH IS CONSIDERED THE "WINTER CONSTRUCTION PERIOD". IF SOILS WILL BE EXPOSED AFTER NOVEMBER 1ST, A PLAN FOR WINTER CONSTRUCTION MUST BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER ON OR BEFORE OCTOBER 1ST. THE CONTRACTOR SHALL ENSURE SEDIMENT CONTROL IS INSTALLED PRIOR TO THE SOIL FREEZING. AN INSPECTION WILL BE REQUIRED IF THE PROJECT IS COMPLETED DURING THE WINTER MONTHS TO ENSURE THE SITE IS SECURED FOR THE REMAINDER OF THE SEASON.
7. DURING THE WINTER CONSTRUCTION SEASON, ANY NEW DISTURBANCE MUST BE STABILIZED (TEMPORARY OR FINAL) AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
   A. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD
   B. WORK IS OCCURRING WITHIN A SELF-CONTAINED EXCAVATION, 2-FEET OR MORE IN DEPTH.
7. IN NO CASE SHALL SOIL BE EXPOSED FOR MORE THAN 14 DAY WITHOUT BEING STABILIZED.
8. ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED WITHIN 48 HOURS OF FINAL GRADING.
9. THE PERIMETER OF THE SITE AND ALL BMPS SHALL BE INSPECTED AT THE END OF EACH WORK DAY TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE. IF SEDIMENT HAS TRAVELED BEYOND THE PROJECT LIMITS, IT SHALL BE RELOCATED IN AN UPGRADIENT AREA ON SITE AT THE END OF EACH WORK DAY.
10. ALL STABILIZATION INVOLVING SEEDING IS TO BE COMPLETED BY SEPTEMBER 15TH.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION OF THE ADJACENT ROADWAY'S FOR OFF-SITE TRACKING OF SOIL MATERIALS. SOIL, STONE, AND DEBRIS FOUND LEAVING THE SITE ARE TO BE REMOVED (WHEN FOUND) BY SWEEPING AT THE END OF EACH CONSTRUCTION DAY, OR MORE FREQUENTLY WHEN NEEDED TO PREVENT IMPACTS TO ADJACENT ROADS AND SIDEWALKS.
12. IF DEWATERING IS REQUIRED FOR CONSTRUCTION, THE CONTRACTOR MUST UTILIZE SEDIMENT FILTER BAGS (OR ALTERNATE APPROVED BY THE ENGINEER) TO PREVENT DISCHARGE OF SEDIMENT-LADEN WATER OFF SITE.
13. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE PLACED ONSITE IN A LOCATION TO BE APPROVED OF BY THE OWNER AND/OR THE ENGINEER OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.
14. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC.) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.
15. SLOPES GREATER THAN 3:1 SHALL HAVE EROSION CONTROL NETTING INSTALLED TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. NETTING SHALL BE BIODEGRADABLE WITH A 12 MONTH LONGEVITY, S150BN AS MANUFACTURED OR APPROVED EQUIVALENT. INSTALL NETTING OVER MULCHED SLOPES SO THAT ALL PARTS ARE IN CONTACT WITH THE SOIL AND MULCH. PIN NETTING WITH WIRE STAPLES 3 FEET O.C. TO ENSURE FULL BONDING WITH SOIL SURFACE. THE SLOPE SURFACES SHOULD BE LEFT SLIGHTLY ROUGHENED AND NOT SMOOTH. IF LARGE AMOUNTS OF OFFSITE WATER WILL DRAIN OVER THESE SLOPES, TEMPORARY DIVERSION SWALES SHALL BE INSTALLED UP SLOPE UNTIL THE SLOPE VEGETATION STABILIZES.
16. THE OWNER SHALL BE NOTIFIED WHEN SITE WORK IS COMPLETED AND THE SITE IS STABILIZED.

SMITH
ALVAREZ
SIENKIEWYCZ
ARCHITECTS
117 St. Paul Street
3rd Floor
Burlington, VT
05401
P: 802 • 863 • 2227
F: 802 • 863 • 0093

CONSULTANTS

CIVIL
ENGINEERING VENTURES
208 FLYNN AVE, SUITE 2A
BURLINGTON, VT 05401
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P: 802-425-2877
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120 GRAHAM WAY, SUITE 124
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LN CONSULTING
PO BOX 65178
BURLINGTON, VT 05406-5178
P: 802-655-1753
F: 802-655-7628

SAS PROJECT NUMBER: 0917

PROJECT

HULA
•
BUILDING 32
•
32 LAKESIDE AVE
BURLINGTON, VT

DATE: 05/05/2020
SCALE: AS NOTED
CHECKED: KW
DRAWN BY: HKW

REVISIONS

EPSC
Details

C2.2